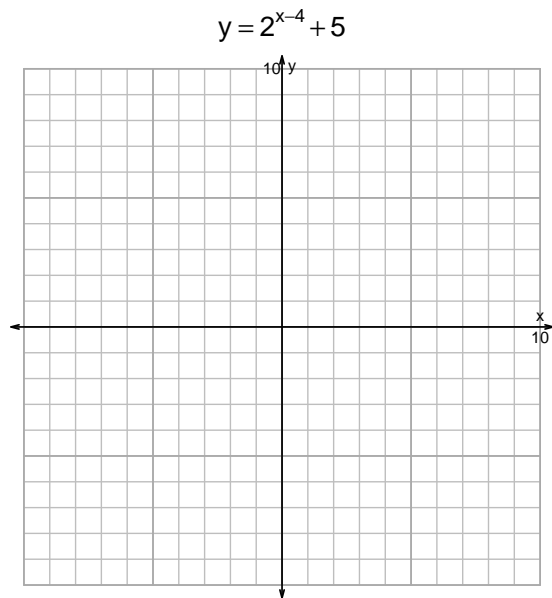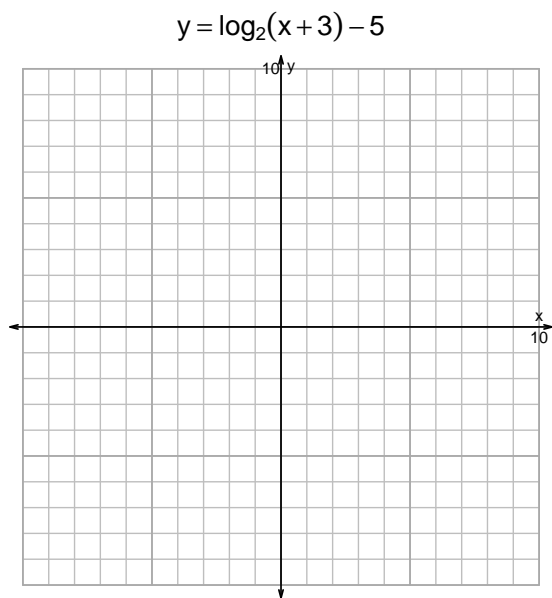Name: _____   Date: _____
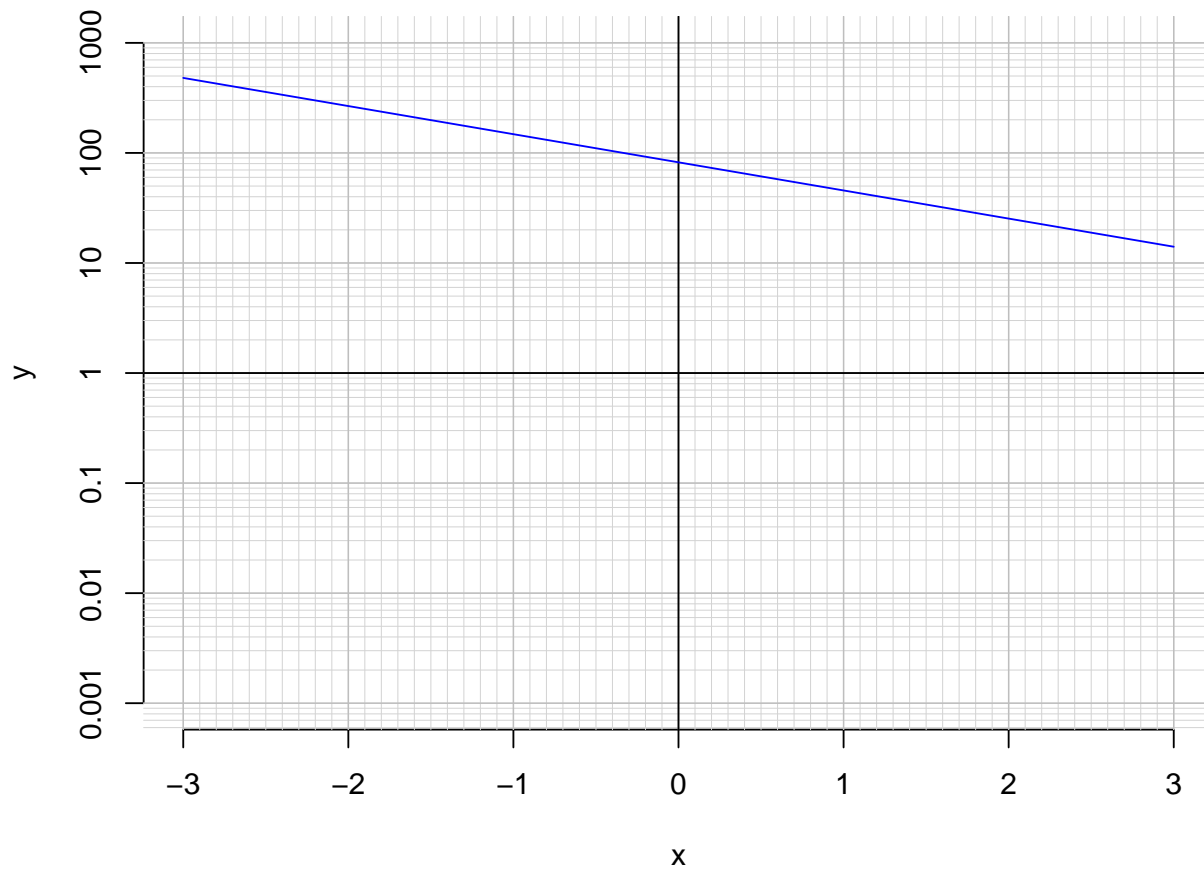
s18QUIZ: EXP LOG (QUIZ v264)

1. Graph $y = \log_2(x + 3) - 5$ and $y = 2^{x-4} + 5$ on the grids below. Also, draw any asymptotes with dotted lines.

$$y = \log_2(x + 3) - 5$$

$$y = 2^{x-4} + 5$$

2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$29 = \left(\frac{5}{3}\right) \cdot 10^{7t/4}$$

3. An exponential function $f(x) = 82.2 \cdot e^{-0.589x}$ is graphed below on a semi-log plot.

a. Using the plot above, evaluate $f(2.4)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(300)$.